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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,375	09/26/2001	Florian Patrick Nierhaus	2001P17780US	6408

7590 09/16/2005

Siemens Corporation
Attn: Elsa Keller, Legal Administrator
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER

PHAN, MAN U

ART UNIT PAPER NUMBER

2665

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/965,375

Applicant(s)

NIERHAUS ET AL.

Examiner

Man Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7-12,15-19,24 and 25 is/are rejected.
- 7) ☒ Claim(s) 3-6,13,14 and 20-23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/21/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The application of Nierhaus et al. for the "Method for background noise reduction and performance improvement in voice conferencing over packetized" filed 09/26/2001 has been examined. Claims 1-25 are pending in the application.

Claim Objections

2. Claims 1, 10, 18 recite the limitation "a conferencing session" in line 2 (claims 1, 10) and line 5 (claim 18). This should be "the conferencing session", because it is preceded by the same limitation in lines 1 of the claims.

Claim Rejections - 35 USC ' 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 9 and 10, 11, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kline (US#5,530,699) in view of Laursen et al. (US#2003/0002448).

With respect to claim 18, Kline (US#5,530,699) and Laursen et al. (US#2003/0002448) disclose a novel system and method for centralized multipoint conferencing in a packet network, according to the essential features of the claims. Kline (US#5,530,699) discloses in Fig. 2 a conferencing system in packet network comprises a multipoint conferencing unit (42) communicatively coupled over a packetized connection (30, 32, 34) to a plurality of input/output devices (36, 38, 40). Edge nodes 30, 32, 34 continuously sample, compress (encode) and packetize the sound from each user 36, 38, 40, respectively into speech fast packets. Edge nodes 30, 32, 34 send the packets to central conference handler 42. Conference handler 42 decodes the packets and creates a conference speech fast packet for each user 36, 38, 40 that includes the sound from the other users, being careful not to include the sound generated by the user receiving that particular packet. The packet is recompressed. This could be accomplished either by creating one packet as a sum from all three users and then echo cancelling the sound from the user to receive the packet or by using separate summers for each user. Thus, the conference handler 42 creates a conference speech fast packet for user 36 that contains the sound from users 38 and 40. Three different packets are created during each time

segment. The conference packet for each user 36, 38, 40 is then sent through the respective edge nodes 30, 32, 34. Edge nodes 30, 32, 34 disassemble the conference packets, decompress the sound, and play the sound to users 36, 38, 40 (Col. 2, lines 14 plus).

However, Kline does not disclose expressly the step of determining a number of prominent inputs from the received inputs. In the same field of endeavor, Laursen et al. (US#2003/0002448) discloses an apparatus and method for audio conferencing over a packet network. Laursen teach in Figs. 13A-C the flow chart diagrams illustrated the operation of a distributed conference bridge of Fig. 10 in establishing a conference call, in which at step 1320, audio source 1040 determines a number of active speakers based on the energy monitored in step 1310 (*determining a number of prominent inputs from the received inputs*), and any number of active speakers can be selected ([0233]-[0234]).

Regarding claims 1, 9 and 10, 11, 17, they are method claims corresponding to the apparatus claim 18 above. Therefore, claims 1, 9 and 10, 11, 17 are analyzed and rejected as previously discussed with respect to claim 18.

One skilled in the art would have recognized the need for performance improvement of centralized multipoint conferencing in a packet network, and would have applied Laursen's teaching of the determining a number of prominent inputs in establishing conference bridge into Kline's novel use of an voice conferencing in packet network. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Laursen's method and system for distributed conference bridge processing into Kline's method for distributed voice conferencing in a fast packet network with the motivation being to provide a method and system for providing a conferencing session to a plurality of participants.

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6. Claims 2, 7, 8 and 12, 15, 16 and 19, 24, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kline (US#5,530,699) in view of Laursen et al. (US#2003/0002448) as applied to the claims above, and further in view of Mills et al. (US#2002/0167915).

With respect to claims 19, 24, 25, Kline (US#5,530,699) and Laursen et al. (US#2003/0002448) disclose the claimed limitations discussed in paragraph 5 above.

However, these claims differ from the claims above in that the claims require the feature wherein the inputs are determined as prominent based upon a characteristic including at least one of loudness, signal strength, clarity. In the same field of endeavor, Mills et al. (US#2002/0167915) discloses in Fig. 3 a distributed intelligence conferencing system, having a plurality of conferencing nodes to connect groups of participants to a conference. Each of the conferencing nodes provides for the connection of one or more participants to the conference. Each node includes a DSP for distributed signal processing, eliminating the need for a central processor. The node DSP has a signal measuring device for measuring a significant characteristic of the signals from each of the participants, such as power; a processing device, interconnected with the signal measuring device, for determining the relative characteristics, such as power levels, of each of the number of participant input signals; a communication device, interconnected with the processing device, for communicating the measured signal characteristics for a plurality of participant input signals to all other conferencing nodes; muting means for muting individual participant input signals so that only selected signals are transmitted over the conference bus to the other participants ([0012]-[0014]).

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Regarding claims 2, 7, 8 and 12, 15, 16, they are method claims corresponding to the apparatus claims 19, 24, 25 above. Therefore, claims 2, 7, 8 and 12, 15, 16 are analyzed and rejected as previously discussed with respect to claims 19, 24, 25.

One skilled in the art would have recognized the need for performance improvement of centralized multipoint conferencing in a packet network, and would have applied Mills's device for measuring a significant characteristics of the signals from each of the participants, and Laursen's teaching of the determining a number of prominent inputs in establishing conference bridge into Kline's novel use of an voice conferencing in packet network. Therefore, It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to apply Mills's bandwidth efficient conferencing system with distributed processing, and Laursen's method and system for distributed conference bridge processing into Kline's method for distributed voice conferencing in a fast packet network with the motivation being to provide a method and system for providing a conferencing session to a plurality of participants.

Allowable Subject Matter

7. Claims 3-6 and 13, 14 and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for the indication of allowable subject matter: The closest prior art of record fails to disclose or suggest wherein the receive event signal is generated when the input buffer memory unit has a complete data cell stored therein, the receive event signal being cleared when transfer between the input buffer memory

unit and the direct memory access unit is begun, and wherein the transmit event signal is generated when the output buffer memory unit has space for a complete data cell, the transmit event signal being cleared when the transfer of the data cell to the output buffer memory unit from the direct memory access is begun, as specifically recited in claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The Michalewics (US#6,792,092) is cited to show the method and system for independent participant control of audio during multiparty communication sessions.

The Anderson et al. (US#5,436,896) is cited to show conference bridge for packetized speech-signal networks.

The Anderson et al. (US#6,262,979) is cited to show the telecommunication conferencing system and method.

The Jagadeesan et al. (US#2002/0118650) is cited to show the devices, software and methods for generating aggregate comfort noise in teleconferencing over VoIP networks.

The Su et al. (US#6,463,414) is cited to show conference bridge processing of speech in packet network environment.

The O'Malley et al. (US#2004/0101120) is cited to show audio conferencing method.

The O'Neil et al. (US#5,963,547) is cited to show the method and apparatus for centralized multipoint conference in a packet network.

The Apfelbeck et al. (US#5,898,676) is cited to show the method, communication system

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and conference unit for carrying out conferences.

The Peters (US#2003/0012148) is cited to show the software based single agent multipoint conference capability.

The Hirni et al. (US#6,731,609) is cited to show the telephony system for conducting multimedia telephonic conferences over a packet-based network.

The Baxley et al. (US#2004/0085914) is cited to show the large-scale, fault tolerant audio conferencing in a purely packet-switched network.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to

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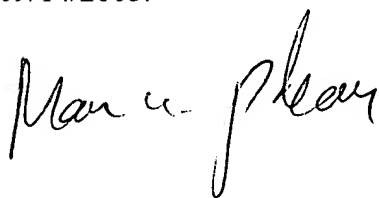
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the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

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A handwritten signature in cursive script, appearing to read "Mphan".